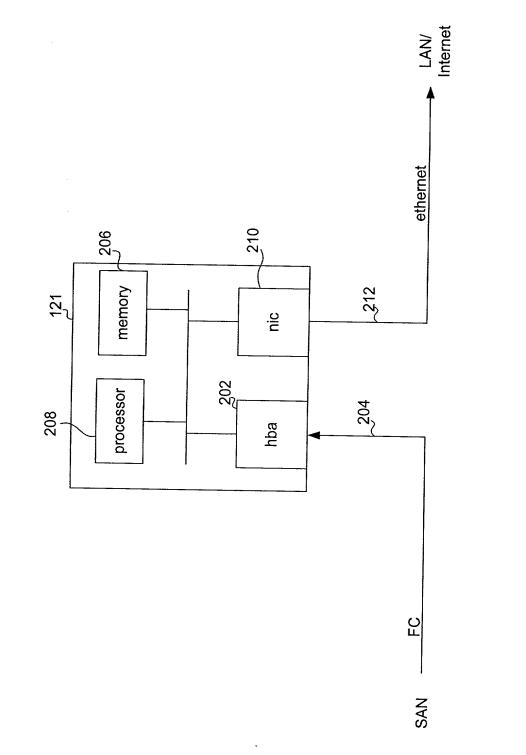


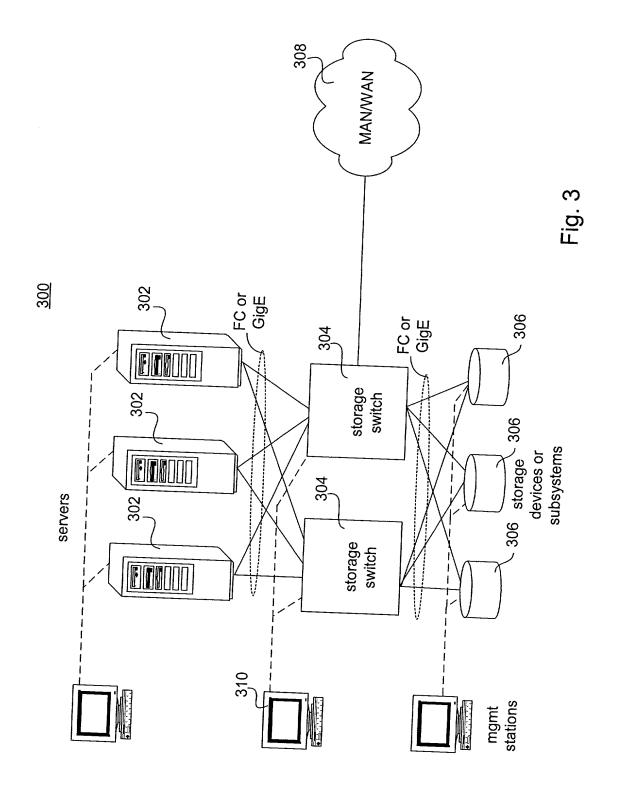
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Attorney: Sarah Barone Schwartz Express Mail No.: EL670724515US

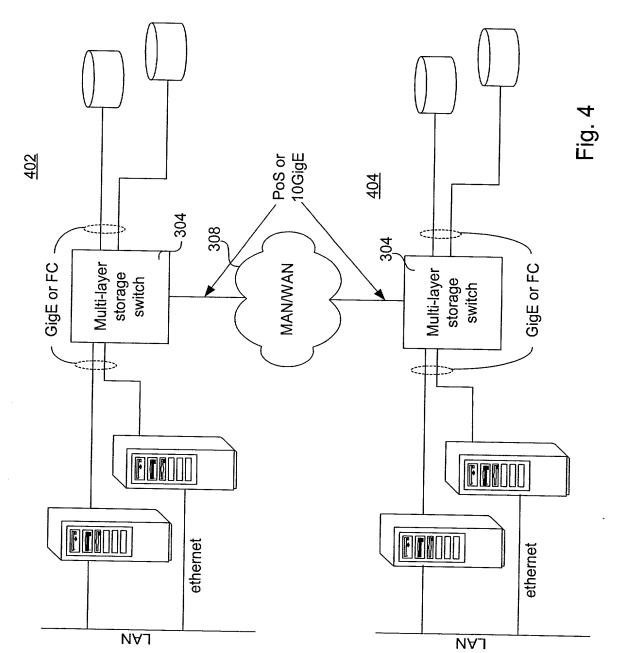


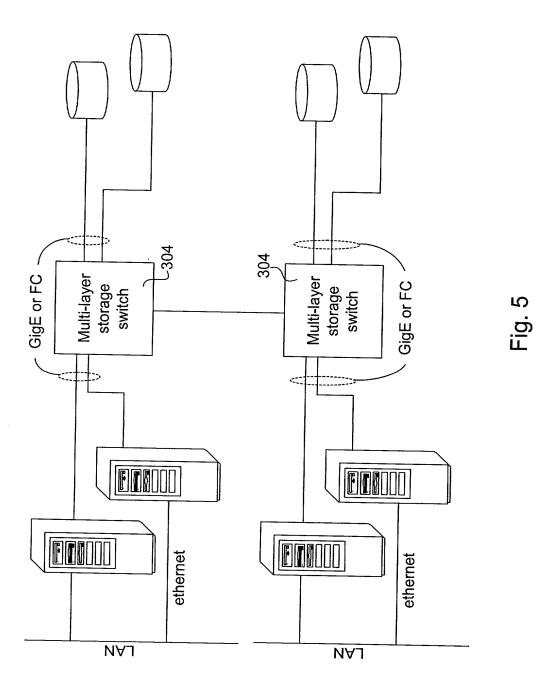
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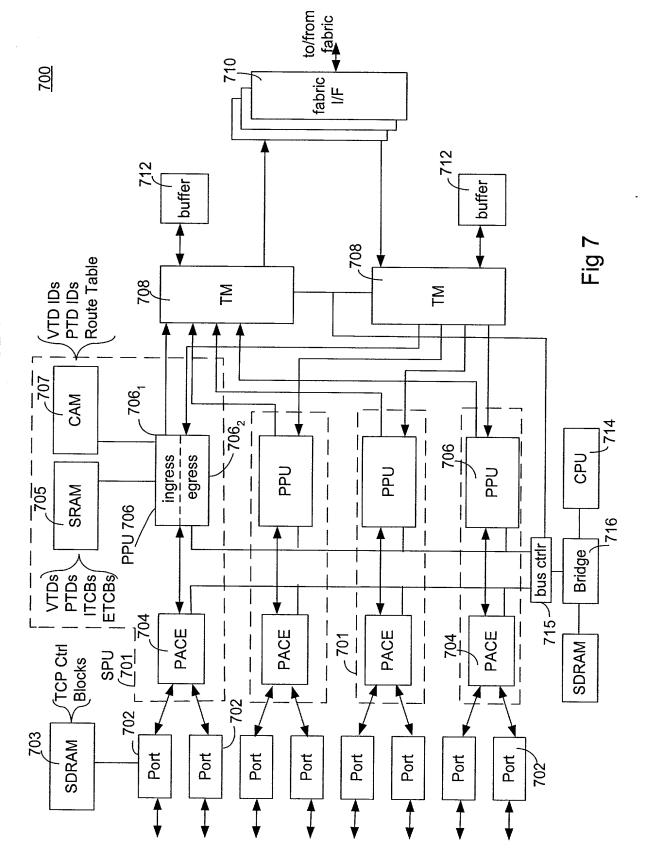
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Fig. 6

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VID
VID
FlowID
Extent Descriptors (e.g., size, location)
of outstanding commands
Max # of commands
Response time
LUN
TCP control block index
S_ID/D_ID
MaxCmdSN
Total open sequences

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Byte	В	yte 0	l Byte 1	I	Byte 2	Byte 3
4	ΧΙ	0x01	FRW 00 ATTI	₹	Rsvd	CRN or Rsvd
8	TotalA	TotalAHSLength DataSegmentLength				
16	Logic	cal Unit Nເ (LUN)	ımber			
20	Initiator Task Tag					
24	Expected Data Transfer Length					
28	CmdSN					
32	ExpStatSN or ExpDataSN					
OZ.						
	S	CSI Comr	nand			

iSCSI Command PDU Fig. 8a

Descriptor Block (CDB)

48

Byte	Byte 0	Byte 1	1	Byte 2	I	Byte 3
4	1 1 0x31	1	Rsvd ((0)		
	Rsvd (0)					
16 20	Initiator Task T	ag				
24	Target Transfer Tag					
28	StatSN					
32	ExpCmdSN				-	
36	MaxCmdSN					
40	R2TSN					
44	Buffer Offset				· · · · · · · · · · · · · · · · · · ·	
48	Desired Data Tr	ansfer Lengt	h			

iscsi R2T PDU Fig. 8b

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3yte _	Byte 0	Byte 1	1	Byte 2	1	Byte 3
0 4	0 0 0x05	F	Rsvd	(0)		
8	Rsvd (0)	DataSegme	entLeng	th		
	LUN or Reserv	ed (0)	-			
16						
20	Initiator Task	Tag				
24	Target Transfe	r Tag or 0xfffff	ffff			
28	Rsvd (0)					
32	ExpCmdSN					
36	Rsvd (0)					
40	DataSN				-	
44	Buffer Offset					
48	Rsvd (0)					
70	Data					
L						

iSCSI Write Data PDU Fig. 8c

0	Byte 0	Byte 1	Byte 2	l Byte 3
4	1 1 0x25	F OUS	Rsvd (0)	Status or Rsvd
8	Rsvd (0)	DataSegmentLe	ength	
	Rsvd (0)			
16	Initiator Task T	ag		
20 24	Rsvd (0)			
28	StatSN or Rsvd	(0)		
32	ExpCmdSN			
36	MaxCmdSN			
40	DataSN			
44	Buffer Offset			
48	Residual Count			
	Data	-		

iSCSI Read Data PDU Fig. 8d

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_	Byte 0	Byte 1	Byte 2	Byte 3		
4	1 1 0x21 Rsvd (0)	1 rsv 0 u 0 u 0 DataSegmentLe	Status ength	Response		
8	Rsvd (0)					
16 20 24 28 32 36 40 44	Initiator Task Tag Basic Residual count StatSN ExpCmdSN MaxCmdSN ExpDataSN or Rsvd (0) ExpR2TSN or Rsvd (0)					
48	Bidi-Read Resid	d Response Data	(optional)			

iSCSI Response PDU Fig. 8e

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Bits	31-24	23-16	15-08	07-00	
Word					
0	R_CTL		D_ID		
1	rsvd	S_ID			
2	TYPE	F_CTL			
3	SEQ_ID	DF_CTL	SEQ_CNT		
4	OX	_ID	RX_ID		
5		RLTV_OFF			

FC Frame Header Fig. 8f

Field Name	Description	Size
FCP_LUN	logical unit number	8 bytes
FCP_CNTL	control field	4 bytes
FCP_CDB	SCSI command descriptor block	16 bytes
FCP_DL	Data Length	4 bytes

FCP_CMND Payload Fig. 8g

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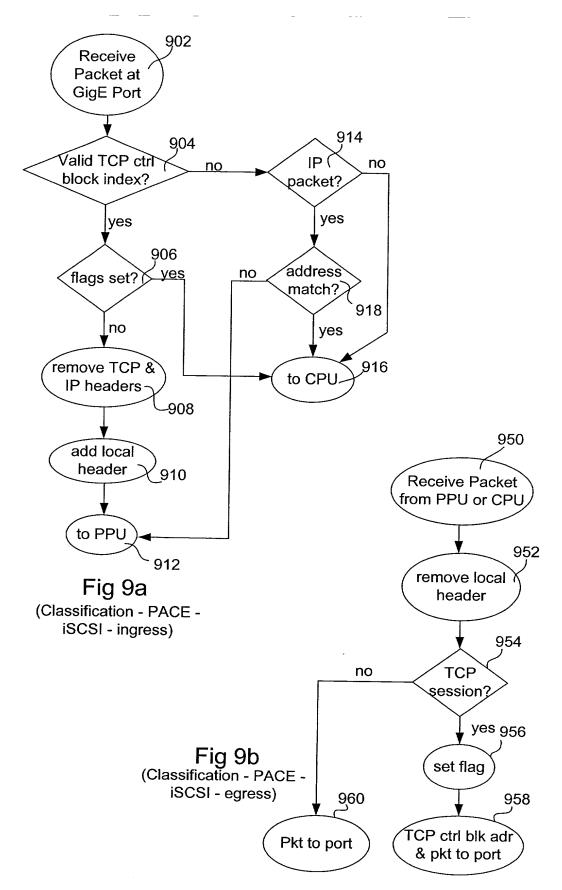
Field Name	Description	Size
DATA_RO	Relative offset of first byte of FCP_DATA IU that follows	4 bytes
BURST_LEN	length of FCP_DATA IU that follows	4 bytes
rsvd		4 bytes

FCP_XFR_RDY Payload Fig. 8h

Field Name	Description	Size
rsvd		4 bytes
rsvd		4 bytes
FCP_STATUS	field validity and SCSI status	4 bytes
FCP_RESID	residual count	4 bytes
FCP_SNS_LEN	Length of FCP_SNS_INFO field	4 bytes
FCP_RSP_LEN	Length of FCP_RSP_INFO field	4 bytes
FCP_RSP_INFO	FCP response info	m bytes
FCP_SNS_INFO	FCP sense info	n bytes

FCP_RSP Payload Fig. 8i

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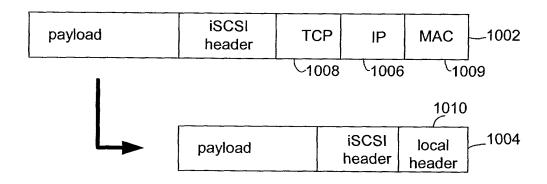


Fig. 10a

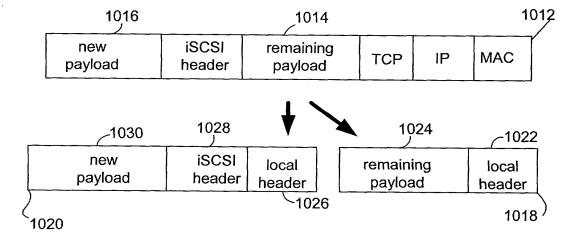


Fig. 10b

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<u>1100</u>

Local Header

VTD ID FlowID

TCP Control Block Index

Type

Size

Task Index

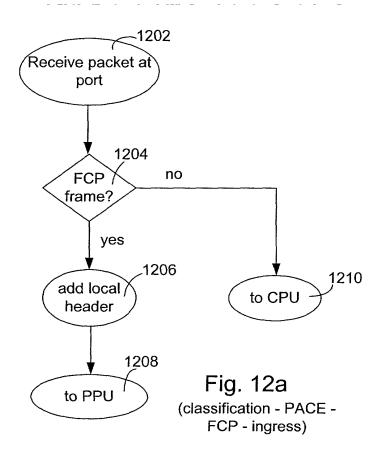
Source (Port, PACE, Linecard, CPU)

Destination (Port, PACE, Linecard,

CPU)

Fig. 11

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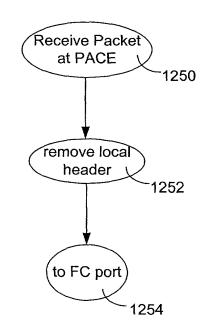
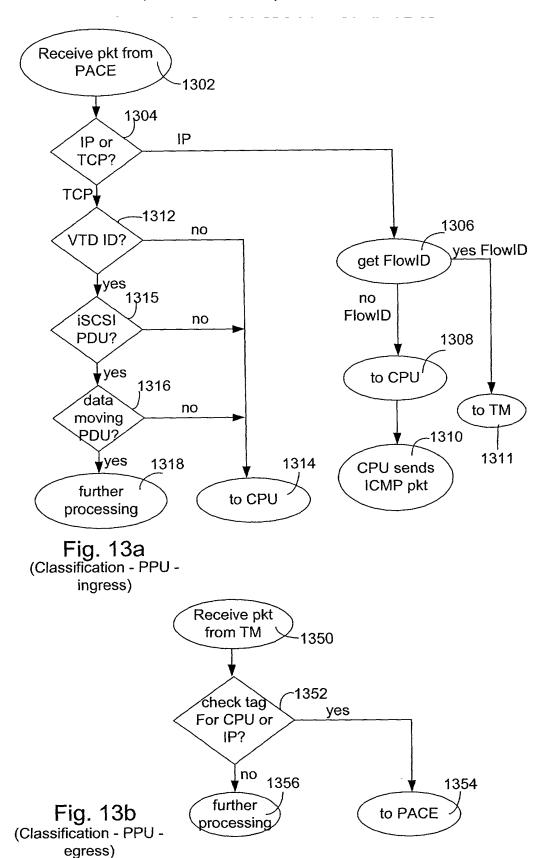


Fig. 12b (classification - PACE -FCP - egress)

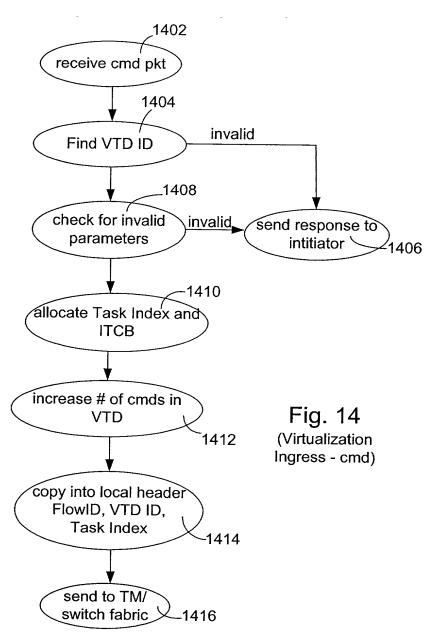
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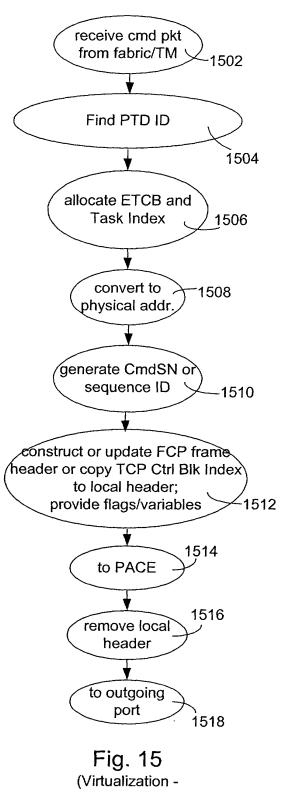
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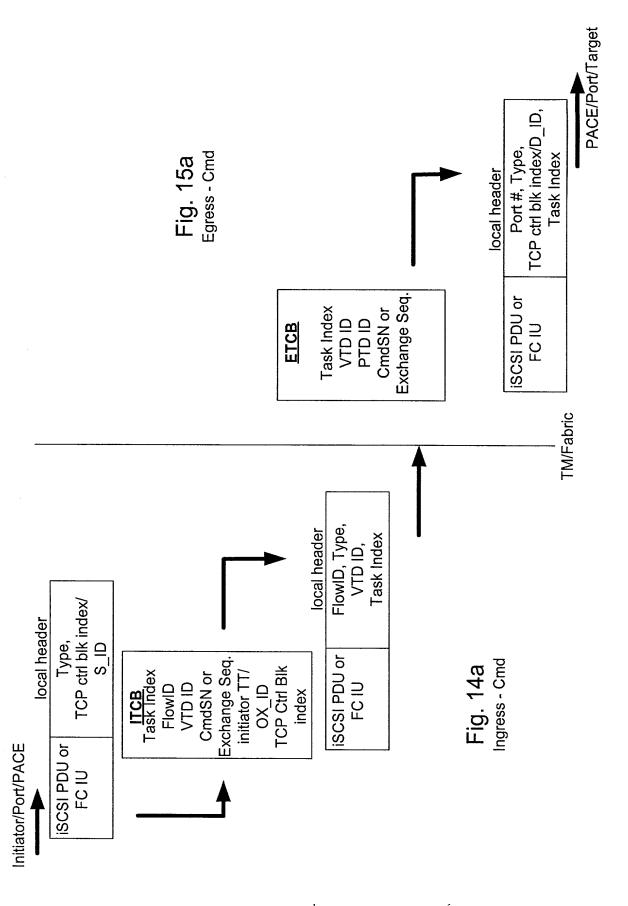
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Egress - cmd)



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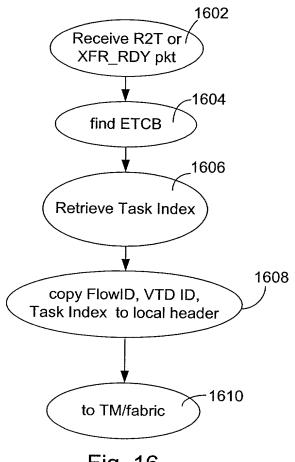


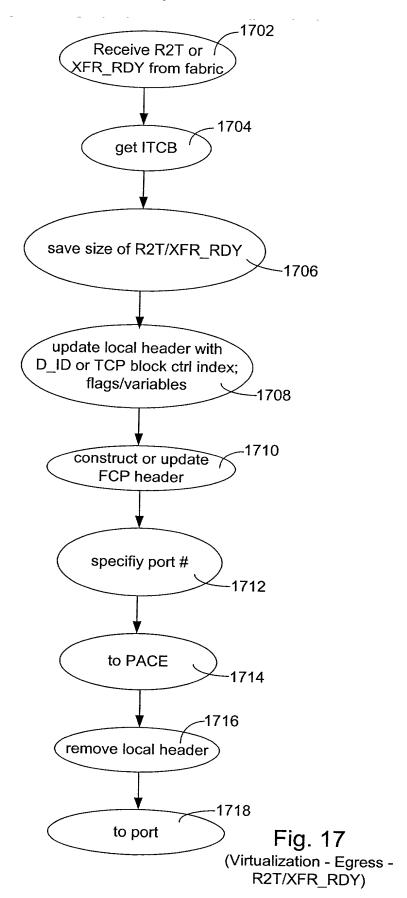
Fig. 16
(Virtualization - Ingress - R2T/XFR_RDY)

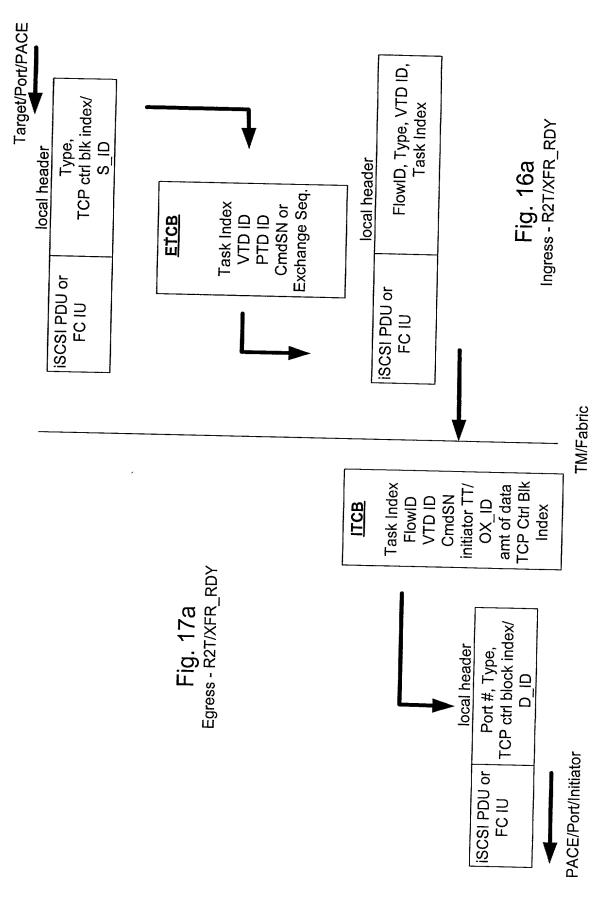
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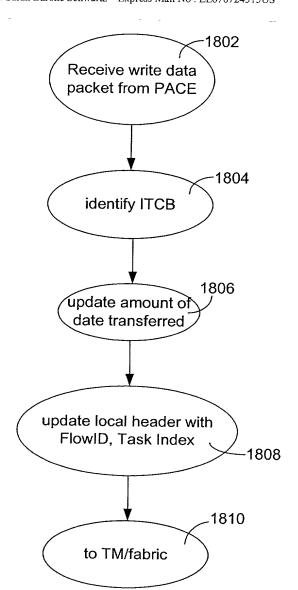


Fig. 18 (Virtualization - Ingress write data packet)

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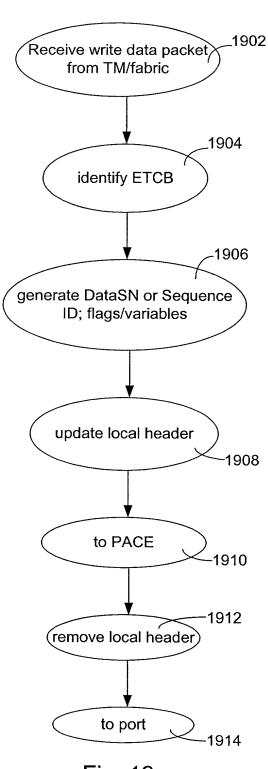
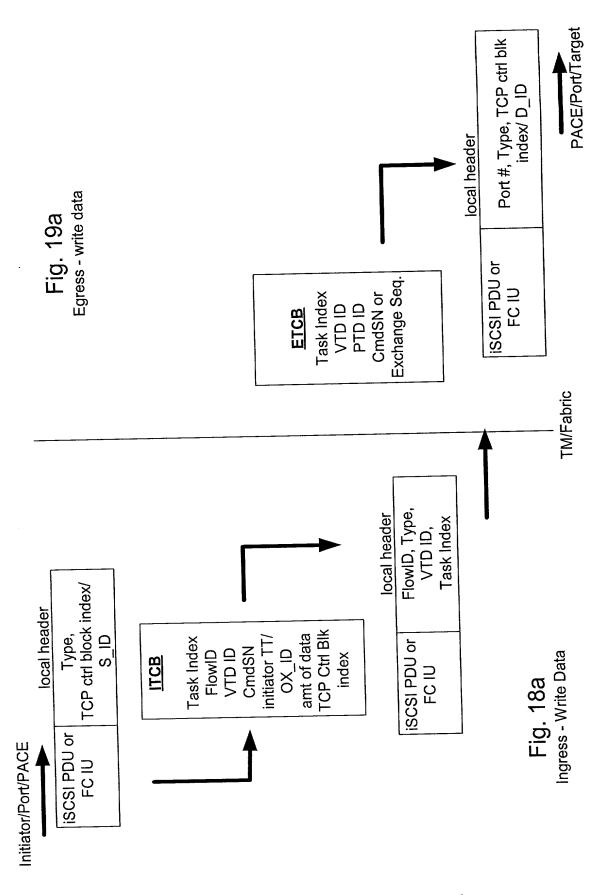


Fig. 19 (Virtualization - Egress write data pkt)



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Receive read data pkt from target 2002

identify ETCB 2004

verify order 2006

verify order 2008

Index, and FlowID to local header 2010

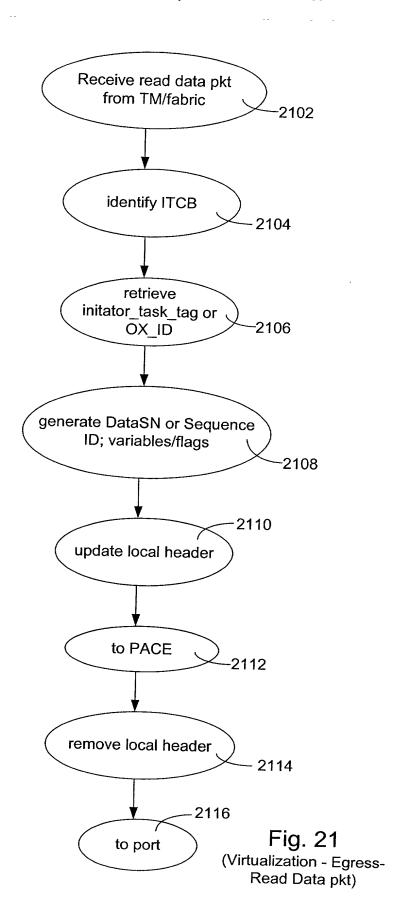
to TM/fabric 2010

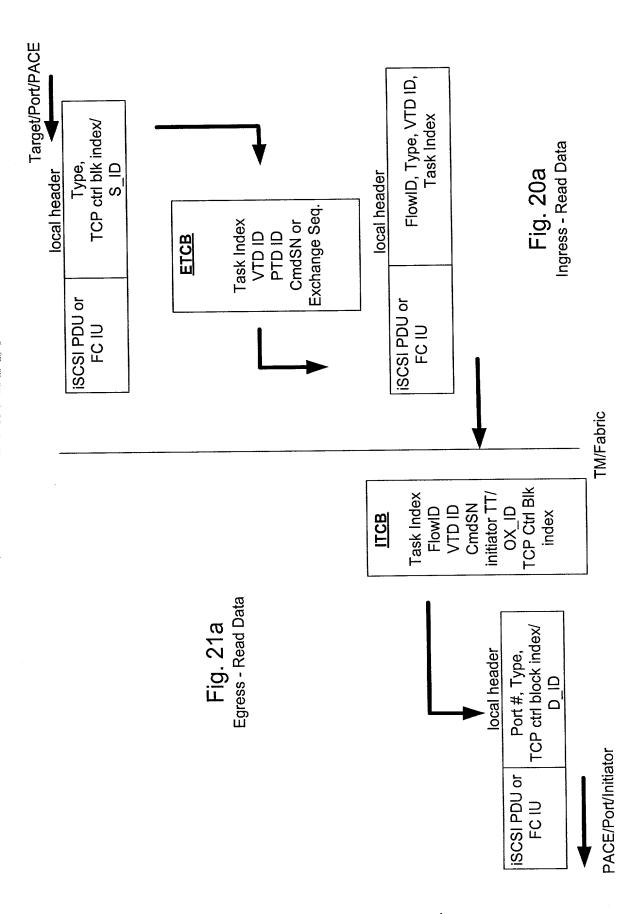
Fig. 20 (Virtualization - Ingress -Read Data pkt)

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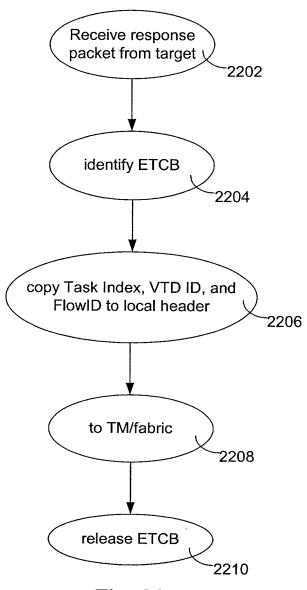
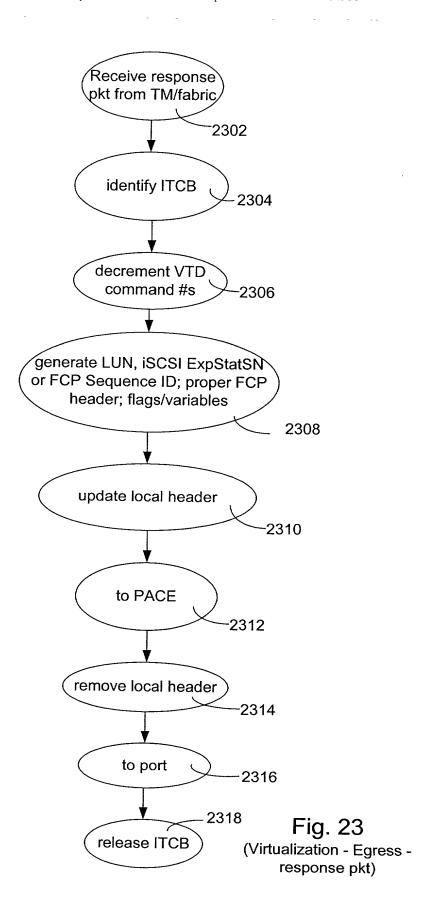


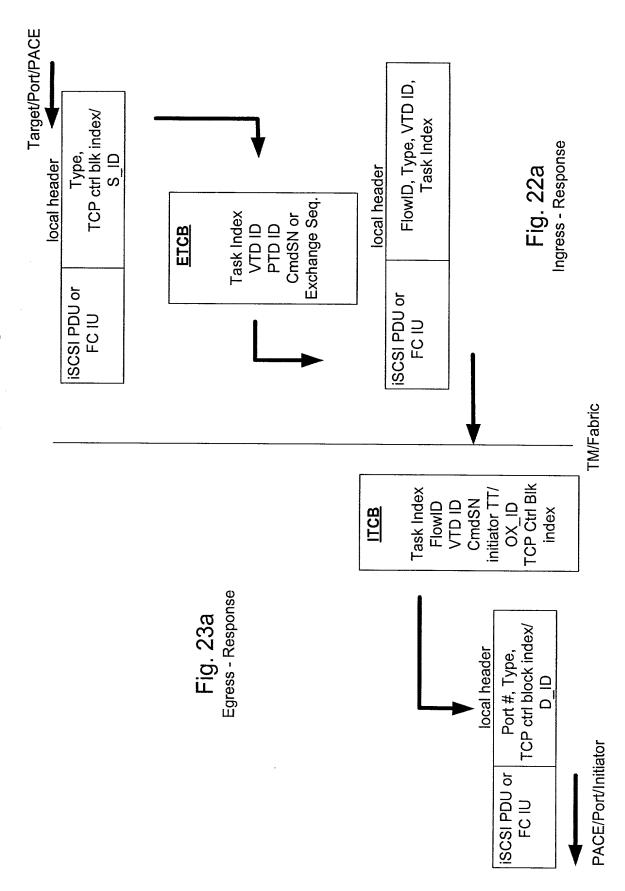
Fig. 22 (Virtualization - Ingress - response pkt)

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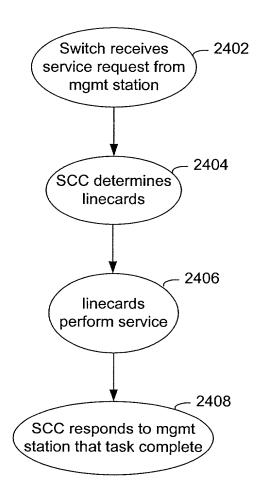
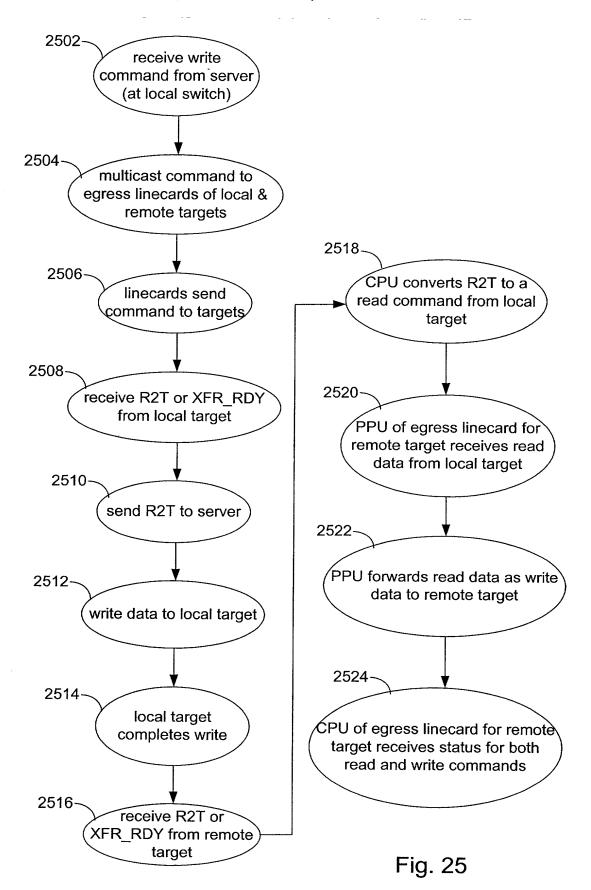


Fig.24

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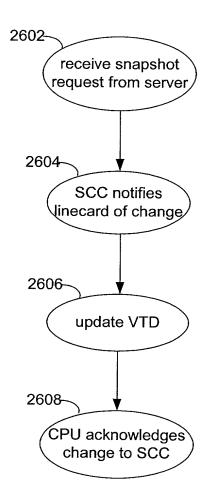
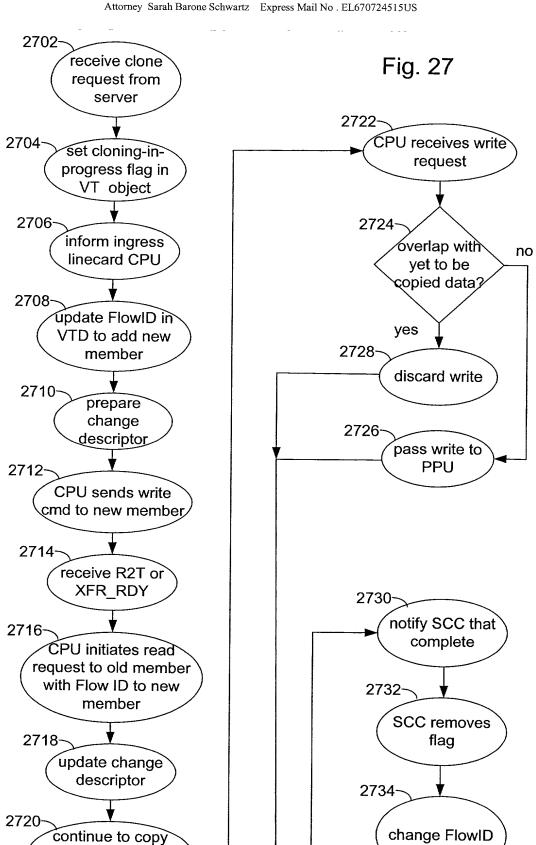


Fig. 26

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block by block until

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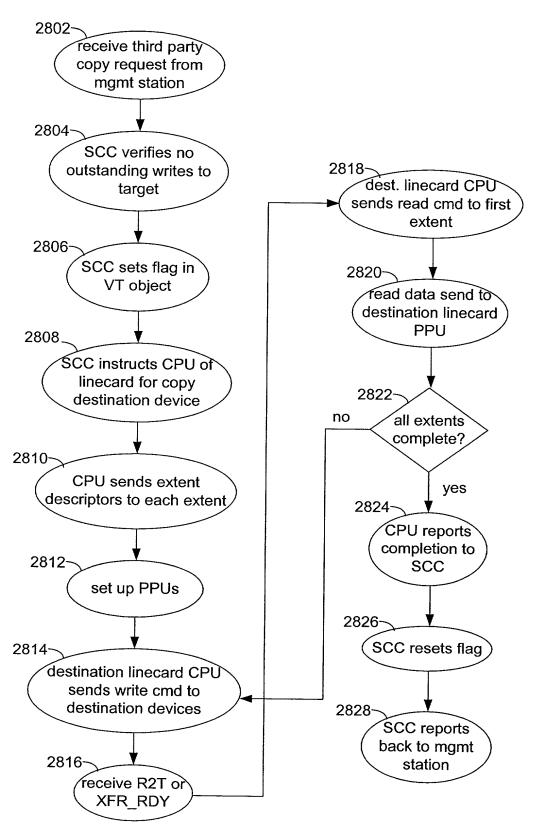


Fig. 28